

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 101S18,341  
Source: PCT  
Date Processed by STIC: 1-5-05

# ENTERED

## **CRF Errors Edited by the STIC Systems Branch**

Serial Number: 101S18,341

CRF Edit Date: 1-5-05  
Edited by: TCL

Realigned nucleic acid/amino acid numbers/text increases where the sequence text "wrapped" to the next line

Corrected the SEQ ID NO. Sequence numbers edited were:  
\_\_\_\_\_

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:  
\_\_\_\_\_

Deleted:  invalid beginning/end-of-file text : \_\_\_\_\_ page numbers

Inserted mandatory headings/numeric identifiers, specifically:  
\_\_\_\_\_

Moved responses to same line as heading/numeric identifier, specifically:  
\_\_\_\_\_

Other:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



PCT

**RAW SEQUENCE LISTING** DATE: 01/05/2005  
**PATENT APPLICATION:** US/10/518,341 TIME: 11:04:03

Input Set : A:\pto.kd.txt  
 Output Set: N:\CRF4\01052005\J518341.raw

5 <110> APPLICANT: VAN ELS, Cecile Antoinette Carola Maria  
 6 VAN BLEEK, Gerarda Maria  
 7 BOOG, Marie-Claire Josefa Pia  
 9 <120> TITLE OF INVENTION: MHC class II haplotype specific immunodominancy of  
 10 peptides derived from RSV fusion (F) or attachment  
 11 (G) proteins  
 15 <130> FILE REFERENCE: 28902.0014  
 C--> 17 <140> CURRENT APPLICATION NUMBER: US/10/518,341  
 18 <141> CURRENT FILING DATE: 2004-12-17  
 20 <150> PRIOR APPLICATION NUMBER: PCT/NL03/00454  
 21 <151> PRIOR FILING DATE: 2003-06-20  
 23 <150> PRIOR APPLICATION NUMBER: EP 02077461.8  
 24 <151> PRIOR FILING DATE: 2002-06-20  
 26 <160> NUMBER OF SEQ ID NOS: 29  
 30 <170> SOFTWARE: PatentIn version 3.1  
 34 <210> SEQ ID NO: 1  
 36 <211> LENGTH: 574  
 38 <212> TYPE: PRT  
 40 <213> ORGANISM: respiratory syncytial virus  
 44 <400> SEQUENCE: 1

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 46 Met Glu Leu Leu Ile Leu Lys Ala Asn Ala Ile Thr Thr Ile Leu Thr      15
 47 1           5          10          15
 50 Ala Val Thr Phe Cys Phe Ala Ser Gly Gln Asn Ile Thr Glu Glu Phe      30
 51           20          25          30
 54 Tyr Gln Ser Thr Cys Ser Ala Val Ser Lys Gly Tyr Leu Ser Ala Leu      45
 55           35          40          45
 58 Arg Thr Gly Trp Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile
 59           50          55          60
 62 Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys      80
 63 65           70          75          80
 66 Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu
 67           85          90          95
 70 Met Gln Ser Thr Pro Pro Thr Asn Asn Arg Ala Arg Arg Glu Leu Pro      110
 71           100         105         110
 74 Arg Phe Met Asn Tyr Thr Leu Asn Asn Ala Lys Lys Thr Asn Val Thr      125
 75           115         120         125
 78 Leu Ser Lys Lys Arg Lys Arg Arg Phe Leu Gly Phe Leu Leu Gly Val
 79           130         135         140
 82 Gly Ser Ala Ile Ala Ser Gly Val Ala Val Ser Lys Val Leu His Leu      160
 83 145           150         155         160
 86 Glu Gly Glu Val Asn Lys Ile Lys Ser Ala Leu Leu Ser Thr Asn Lys      175
 87           165         170         175
 90 Ala Val Val Ser Leu Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val
  
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91	180	185	190
94	Leu Asp Leu Lys Asn Tyr Ile Asp Lys Gln Leu Leu Pro Ile Val Asn		
95	195	200	205
98	Lys Gln Ser Cys Ser Ile Ser Asn Ile Glu Thr Val Ile Glu Phe Gln		
99	210	215	220
102	Gln Lys Asn Asn Arg Leu Leu Glu Ile Thr Arg Glu Phe Ser Val Asn		
103	225	230	235
106	Ala Gly Val Thr Thr Pro Val Ser Thr Tyr Met Leu Thr Asn Ser Glu		
107	245	250	255
110	Leu Leu Ser Leu Ile Asn Asp Met Pro Ile Thr Asn Asp Gln Lys Lys		
111	260	265	270
114	Leu Met Ser Asn Asn Val Gln Ile Val Arg Gln Gln Ser Tyr Ser Ile		
115	275	280	285
118	Met Ser Ile Ile Lys Glu Glu Val Leu Ala Tyr Val Val Gln Leu Pro		
119	290	295	300
122	Leu Tyr Gly Val Ile Asp Thr Pro Cys Trp Lys Leu His Thr Ser Pro		
123	305	310	315
126	Leu Cys Thr Thr Asn Thr Lys Glu Gly Ser Asn Ile Cys Leu Thr Arg		
127	325	330	335
130	Thr Asp Arg Gly Trp Tyr Cys Asp Asn Ala Gly Ser Val Ser Phe Phe		
131	340	345	350
134	Pro Gln Ala Glu Thr Cys Lys Val Gln Ser Asn Arg Val Phe Cys Asp		
135	355	360	365
138	Thr Met Asn Ser Leu Thr Leu Pro Ser Glu Ile Asn Leu Cys Asn Val		
139	370	375	380
142	Asp Ile Phe Asn Pro Lys Tyr Asp Cys Lys Ile Met Thr Ser Lys Thr		
143	385	390	395
146	Asp Val Ser Ser Val Ile Thr Ser Leu Gly Ala Ile Val Ser Cys		
147	405	410	415
150	Tyr Gly Lys Thr Lys Cys Thr Ala Ser Asn Lys Asn Arg Gly Ile Ile		
151	420	425	430
154	Lys Thr Phe Ser Asn Gly Cys Asp Tyr Val Ser Asn Lys Gly Met Asp		
155	435	440	445
158	Thr Val Ser Val Gly Asn Thr Leu Tyr Tyr Val Asn Lys Gln Glu Gly		
159	450	455	460
162	Lys Ser Leu Tyr Val Lys Gly Glu Pro Ile Ile Asn Phe Tyr Asp Pro		
163	465	470	475
166	Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn		
167	485	490	495
170	Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu		
171	500	505	510
174	Leu His Asn Val Asn Ala Gly Lys Ser Thr Thr Asn Ile Met Ile Thr		
175	515	520	525
178	Thr Ile Ile Ile Val Ile Ile Val Ile Leu Leu Ser Leu Ile Ala Val		
179	530	535	540
182	Gly Leu Leu Leu Tyr Cys Lys Ala Arg Ser Thr Pro Val Thr Leu Ser		
183	545	550	555
186	Lys Asp Gln Leu Ser Gly Ile Asn Asn Ile Ala Phe Ser Asn		
187	565	570	

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Input Set : A:\pto.kd.txt  
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190 <210> SEQ ID NO: 2  
 192 <211> LENGTH: 306  
 194 <212> TYPE: PRT  
 196 <213> ORGANISM: respiratory syncytial virus  
 200 <400> SEQUENCE: 2  
 202 Met Ser Lys Asn Lys Asp Gln Arg Thr Ala Lys Thr Leu Glu Arg Thr  
 203 1 5 10 15  
 206 Trp Asp Thr Leu Asn His Leu Leu Phe Ile Ser Ser Cys Leu Tyr Lys  
 207 20 25 30  
 210 Leu Asn Leu Lys Ser Val Ala Gln Ile Thr Leu Ser Ile Leu Ala Met  
 211 35 40 45  
 214 Ile Ile Ser Thr Ser Leu Ile Ile Ala Ala Ile Ile Phe Ile Ala Ser  
 215 50 55 60  
 218 Ala Asn His Lys Val Thr Pro Thr Thr Ala Ile Ile Gln Asp Ala Thr  
 219 65 70 75 80  
 222 Ser Gln Ile Lys Asn Thr Thr Pro Thr Tyr Leu Thr Gln Asn Pro Gln  
 223 85 90 95  
 226 Leu Gly Ile Ser Pro Ser Asn Pro Ser Glu Ile Thr Ser Gln Ile Thr  
 227 100 105 110  
 230 Thr Ile Leu Ala Ser Thr Thr Pro Gly Val Lys Ser Thr Leu Gln Ser  
 231 115 120 125  
 234 Thr Thr Val Lys Thr Lys Asn Thr Thr Thr Gln Thr Gln Pro Ser  
 235 130 135 140  
 238 Lys Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro Pro Ser Lys Pro Asn  
 239 145 150 155 160  
 242 Asn Asp Phe His Phe Glu Val Phe Asn Phe Val Pro Cys Ser Ile Cys  
 243 165 170 175  
 246 Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys Arg Ile Pro Asn Lys  
 247 180 185 190  
 250 Lys Pro Gly Lys Lys Thr Thr Lys Pro Thr Lys Lys Pro Thr Leu  
 251 195 200 205  
 254 Lys Thr Thr Lys Lys Asp Pro Lys Pro Gln Thr Thr Lys Ser Lys Glu  
 255 210 215 220  
 258 Val Pro Thr Thr Lys Pro Thr Glu Glu Pro Thr Ile Asn Thr Thr Lys  
 259 225 230 235 240  
 262 Thr Asn Ile Ile Thr Thr Leu Leu Thr Ser Asn Thr Thr Gly Asn Pro  
 263 245 250 255  
 266 Glu Leu Thr Ser Gln Met Glu Thr Phe His Ser Thr Ser Ser Glu Gly  
 267 260 265 270  
 270 Asn Pro Ser Pro Ser Gln Val Ser Thr Thr Ser Glu Tyr Pro Ser Gln  
 271 275 280 285  
 274 Pro Ser Ser Pro Pro Asn Thr Pro Arg Gln Ser Pro Pro Asn Thr Pro  
 275 290 295 300  
 278 Arg Gln  
 279 305  
 282 <210> SEQ ID NO: 3  
 284 <211> LENGTH: 17  
 286 <212> TYPE: PRT  
 288 <213> ORGANISM: respiratory syncytial virus

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Input Set : A:\pto.kd.txt  
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292 <400> SEQUENCE: 3  
294 Lys Ala Asn Ala Ile Thr Ile Leu Thr Ala Val Thr Phe Cys Phe Ala  
295 1 5 10 15  
298 Ser  
302 <210> SEQ ID NO: 4  
304 <211> LENGTH: 18  
306 <212> TYPE: PRT  
308 <213> ORGANISM: respiratory syncytial virus  
312 <400> SEQUENCE: 4  
314 Thr Ile Leu Thr Ala Val Thr Phe Cys Phe Ala Ser Gly Gln Asn Ile  
315 1 5 10 15  
318 Thr Glu  
322 <210> SEQ ID NO: 5  
324 <211> LENGTH: 18  
326 <212> TYPE: PRT  
328 <213> ORGANISM: respiratory syncytial virus  
332 <400> SEQUENCE: 5  
334 Gly Gln Asn Ile Thr Glu Glu Phe Tyr Gln Ser Thr Cys Ser Ala Val  
335 1 5 10 15  
338 Ser Lys  
342 <210> SEQ ID NO: 6  
344 <211> LENGTH: 18  
346 <212> TYPE: PRT  
348 <213> ORGANISM: respiratory syncytial virus  
352 <400> SEQUENCE: 6  
354 Glu Phe Tyr Gln Ser Thr Cys Ser Ala Val Ser Lys Gly Tyr Leu Ser  
355 1 5 10 15  
358 Ala Leu  
362 <210> SEQ ID NO: 7  
364 <211> LENGTH: 18  
366 <212> TYPE: PRT  
368 <213> ORGANISM: respiratory syncytial virus  
372 <400> SEQUENCE: 7  
374 Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn  
375 1 5 10 15  
378 Gly Thr  
382 <210> SEQ ID NO: 8  
384 <211> LENGTH: 18  
386 <212> TYPE: PRT  
388 <213> ORGANISM: respiratory syncytial virus  
392 <400> SEQUENCE: 8  
394 Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln  
395 1 5 10 15  
398 Leu Leu  
402 <210> SEQ ID NO: 9  
404 <211> LENGTH: 18  
406 <212> TYPE: PRT  
408 <213> ORGANISM: respiratory syncytial virus  
412 <400> SEQUENCE: 9

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Input Set : A:\pto.kd.txt  
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414 Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
415 1 5 10 15  
418 Pro Pro  
422 <210> SEQ ID NO: 10  
424 <211> LENGTH: 18  
426 <212> TYPE: PRT  
428 <213> ORGANISM: respiratory syncytial virus  
432 <400> SEQUENCE: 10  
434 Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser Val Leu Thr Ser  
435 1 5 10 15  
438 Lys Val  
442 <210> SEQ ID NO: 11  
444 <211> LENGTH: 18  
446 <212> TYPE: PRT  
448 <213> ORGANISM: respiratory syncytial virus  
452 <400> SEQUENCE: 11  
454 Arg Leu Leu Glu Ile Thr Arg Glu Phe Ser Val Asn Ala Gly Val Thr  
455 1 5 10 15  
458 Thr Pro  
462 <210> SEQ ID NO: 12  
464 <211> LENGTH: 18  
466 <212> TYPE: PRT  
468 <213> ORGANISM: respiratory syncytial virus  
472 <400> SEQUENCE: 12  
474 Arg Glu Phe Ser Val Asn Ala Gly Val Thr Thr Pro Val Ser Thr Tyr  
475 1 5 10 15  
478 Met Leu  
482 <210> SEQ ID NO: 13  
484 <211> LENGTH: 18  
486 <212> TYPE: PRT  
488 <213> ORGANISM: respiratory syncytial virus  
492 <400> SEQUENCE: 13  
494 Pro Ile Thr Asn Asp Gln Lys Leu Met Ser Asn Asn Val Gln Ile  
495 1 5 10 15  
498 Val Arg  
502 <210> SEQ ID NO: 14  
504 <211> LENGTH: 17  
506 <212> TYPE: PRT  
508 <213> ORGANISM: respiratory syncytial virus  
512 <400> SEQUENCE: 14  
514 Lys Leu Met Ser Asn Asn Val Gln Ile Val Arg Gln Gln Ser Tyr Ser  
515 1 5 10 15  
518 Ile  
522 <210> SEQ ID NO: 15  
524 <211> LENGTH: 18  
526 <212> TYPE: PRT  
528 <213> ORGANISM: respiratory syncytial virus  
532 <400> SEQUENCE: 15  
534 Glu Val Leu Ala Tyr Val Val Gln Leu Pro Leu Tyr Gly Val Ile Asp

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/518,341

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Input Set : A:\pto.kd.txt  
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L:17 M:270 C: Current Application Number differs, Replaced Current Application Number